
Virginia's Audiologist Workforce: 2016

Healthcare Workforce Data Center

January 2017

Virginia Department of Health Professions
Healthcare Workforce Data Center
Perimeter Center
9960 Mayland Drive, Suite 300
Richmond, VA 23233
804-367-2115, 804-527-4466(fax)
E-mail: HWDC@dhp.virginia.gov

Follow us on Tumblr: www.vahwdc.tumblr.com

417 Audiologists voluntarily participated in this survey. Without their efforts the work of the center would not be possible. The Department of Health Professions, the Healthcare Workforce Data Center, and the Board of Audiology & Speech-Language Pathology express our sincerest appreciation for your ongoing cooperation.

Thank You!

Virginia Department of Health Professions

David E. Brown, D.C.
Director

Lisa R. Hahn, MPA
Chief Deputy Director

Healthcare Workforce Data Center Staff:

Dr. Elizabeth Carter, Ph.D.
Executive Director

Yetty Shobo, Ph.D.
Deputy Director

Laura Jackson
Operations Manager

Christopher Coyle
Research Assistant

The Board of Audiology & Speech-Language Pathology

Chair

A. Tucker Gleason, Ph.D., CCC-A
Jeffersonton

Vice-Chair

Laura Purcell Verdun, MA, CCC-SLP
Oak Hill

Members

Corliss V. Booker, Ph.D., APRN, FNP-BC
Chester

Bradley W. Kesser, M.D.
Charlottesville

Lillian B. Beahm, Au.D., CCC-A
Roanoke

Angela W. Moss, MA, CCC-SLP
Henrico

Ronald Spencer, RN
Midlothian

Executive Director

Leslie L. Knachel

Contents

Results in Brief.....	2
Summary of Trends	3
Survey Response Rates.....	4
The Workforce.....	5
Demographics.....	6
Background	7
Education	9
Specializations & Credentials.....	10
Current Employment Situation	11
Employment Quality.....	12
2016 Labor Market	13
Work Site Distribution	14
Establishment Type	15
Time Allocation	17
Patient Workload	18
Retirement & Future Plans	19
Full-Time Equivalency Units.....	21
Maps	22
Council on Virginia’s Future Regions	22
Area Health Education Center Regions	23
Workforce Investment Areas	24
Health Services Areas	25
Planning Districts.....	26
Appendix	27
Weights	27

The Audiologist Workforce: At a Glance:

The Workforce

Licenses:	526
Virginia's Workforce:	406
FTEs:	356

Background

Rural Childhood:	27%
HS Degree in VA:	39%
Prof. Degree in VA:	31%

Current Employment

Employed in Prof.:	95%
Hold 1 Full-time Job:	73%
Satisfied?:	98%

Survey Response Rate

All Licenses:	79%
Renewing Practitioners:	90%

Education

Au.D.:	66%
Masters:	25%

Job Turnover

Switched Jobs in 2016:	5%
Employed over 2 yrs:	65%

Demographics

Female:	88%
Diversity Index:	19%
Median Age:	46

Finances

Median Income:	\$70k-\$80k
Health Benefits:	60%
Under 40 w/ Ed debt:	63%

Primary Roles

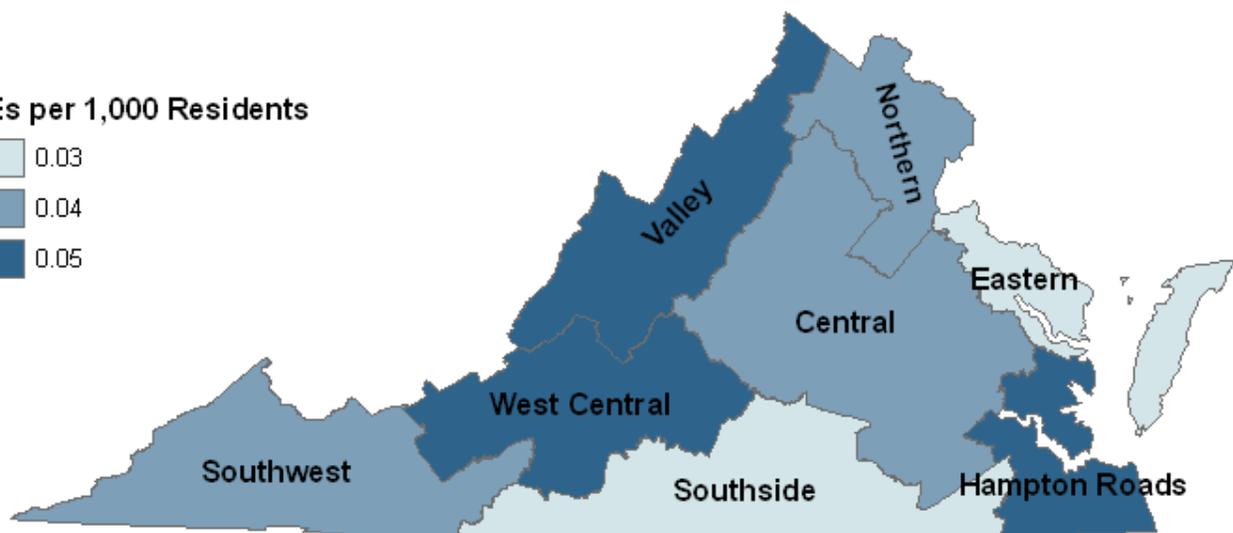
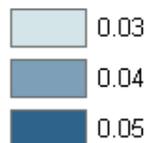
Patient Care:	82%
Administration:	2%
Non-Clinical Edu.:	1%

Source: Va. Healthcare Workforce Data Center

Full Time Equivalency Units per 1,000 Residents by Council on Virginia's Future Region

Source: Va Healthcare Workforce Data Center

FTEs per 1,000 Residents



Annual Estimates of the Resident Population: July 1, 2014
Source: U.S. Census Bureau, Population Division



417 audiologists voluntarily took part in the 2016 Audiologist Workforce Survey. The Virginia Department of Health Professions' Healthcare Workforce Data Center (HWDC) administers the survey during the license renewal process, which takes place every December for audiologists. These survey respondents represent 79% of the 526 audiologists who are licensed in the state and 90% of renewing practitioners.

The HWDC estimates that 406 audiologists participated in Virginia's workforce during the survey period, which is defined as those who worked at least a portion of the year in the state or who live in the state and intend to return to work as an audiologist at some point in the future. During 2016, Virginia's audiologist workforce provided 356 "full-time equivalency units", which the HWDC defines simply as working 2,000 hours a year (or 40 hours per week for 50 weeks with 2 weeks off).

88% of all audiologists are female, including 97% of all audiologists under the age of 40. In a random encounter between two audiologists, there is only a 19% chance that they would be of different races or ethnicities, a measure known as the diversity index. Virginia's audiologist workforce is significantly less diverse than the state's overall population, where there is a 55% chance that two randomly chosen people would be of different races or ethnicities.

27% of all audiologists grew up in a rural area, but only 15% of these professionals currently work in non-Metro areas of the state. Overall, 7% of Virginia's audiologists work in non-Metro areas of the state. Meanwhile, 39% of Virginia's audiologists graduated from high school in Virginia, and 31% earned their initial professional degree in the state. In total, 47% of Virginia's audiologists have some educational background in the state.

66% of all audiologists hold a Doctor of Audiology (Au.D.) as their highest professional degree, while another 25% hold a Master's degree. One-third of audiologists currently carry educational debt, including 63% of those under the age of 40. The median debt burden for those audiologists with educational debt is between \$50,000 and \$60,000.

95% of audiologists are currently employed in the profession. 73% of Virginia's audiologist workforce holds one full-time position, while 9% hold two or more positions simultaneously. In addition, 53% of audiologists work between 40 and 49 hours per week, while just 3% work at least 60 hours per week. 65% of Virginia's audiologist workforce have been at their primary work location for more than two years, while just 5% have switched jobs at some point in the past year.

The typical audiologist earned between \$70,000 and \$80,000 last year. In addition, 83% of audiologists who are compensated with either an hourly wage or salary at their primary work location also receive at least one employer-sponsored benefit, including 60% who receive health insurance. 98% of all audiologists are satisfied with their current employment situation, including 75% who indicate they are "very satisfied".

Nearly three-quarters of all audiologists are employed in one of three regions of the state: Northern Virginia, Hampton Roads, and Central Virginia. Meanwhile, 81% of audiologists work in the private sector, including 66% who work at a for-profit establishment. 22% of all audiologists in the state are employed in group private practices, while 21% work at physician offices.

A typical audiologist spends between 80% and 90% of her time treating patients, while most of her remaining time is spent performing administrative tasks. 82% of audiologists serve a patient care role, meaning that at least 60% of their time is spent in patient care activities. In addition, the typical audiologist treats between 30 and 40 patients per week at her primary work location.

40% of audiologists expect to retire by the age of 65. Just 4% of the current workforce expects to retire in the next two years, while half of the current workforce expects to retire by 2041. Over the next two years, 9% of Virginia's audiologists are planning to pursue additional educational opportunities, while 8% plan on increasing patient care activities.

Summary of Trends

In general, there was little change in Virginia's audiologist workforce in 2016, but there were a few interesting differences with respect to some important variables. Compared to 2013, the number of licensed audiologists in Virginia increased by 42 from 484 to 526. At the same time, the number of audiologists who participate in Virginia's workforce increased from 385 to 406. However, these audiologists produced fewer FTEs; they provided 356 FTEs in 2016 compared to 361 FTEs in 2013, a decrease of 5 FTEs over time. Audiologist produced the most FTEs, 363, in 2014 and the lowest, 338 FTEs, in 2015.

There has been little change in the median age of Virginia's audiology workforce over the past four years. Median age declined from 46 to 45 between 2015 and 2014 but has returned and stayed at 46 since 2015. However, there is some evidence that the audiology workforce is aging. The percent above age 55 has consistently increased over the past four years, creeping from 25% in 2013 to 31% in 2016. Along the same line, the percent under 40 years of age declined from 37% in 2013 to 33% in 2016.

Virginia's audiology workforce also became slightly more diverse this year. Although the diversity index among Virginia's audiologists increased from 18% to 19% between 2015 and 2016, it still has not gone back to the 22% reported in 2013 and 2014. Similarly, although the diversity index among those audiologists who are under the age of 40 experienced an increase from 20% to 22% in the past year, it has not gone back to the 24% diversity index of 2013. Further, despite this recent improvement, however, audiologists in Virginia remain far less diverse than the state's overall population.

With respect to education, audiologists were more likely to pursue a doctoral degree. Although 58% of audiologists had a Doctor of Audiology as their highest professional degree in 2013, 66% now report the same in 2016. Those with a doctorate in other field, however, declined slightly from 11% to 9%. Overall, the percent with any type of doctorate or doctor degree increased from 69% to 75%. Meanwhile, the percentage of audiologists holding a Master's degree as their highest professional degree declined from 31% to 25% in the same period.

In addition, audiologists were more likely to hold educational debt, especially among those who are under the age of 40. Although the total share of audiologists in the state who hold educational debt increased from 31% to 33% between 2013 and 2016, the percentage among those under age 40 increased from 59% to 63%. At the same time, the median education debt level has increased substantially over time. Since 2013, the median education debt level among those who carried such debt was between \$30,000 and \$40,000, but this median interval increased to between \$50,000 and \$60,000 this year.

The median annual income for Virginia's audiology workforce held steady at \$70,000 to \$80,000 between 2015 and 2016, maintaining the \$10,000 increase from 2015. Median income was previously \$60,000 to \$70,000 in 2013 and 2014. The share of wage and salaried audiologists who receive at least one employer-sponsored benefit actually fell for the first time in four years from its 4-year high of 85% in 2015 to 83% in 2016. Nonetheless, the state's audiologists remain very satisfied with their jobs: The share of audiologists who were satisfied with their jobs increased slightly from 97% in 2013 to 98% in 2016, but the percentage who said they were very satisfied increased significantly from 68% to 75%.

There was also a significant shift in the relative number of audiologists who work in the non-profit sectors. In 2013, 65% of all audiologists in the state worked in the for-profit sector, while 9% worked in the non-profit sector. However, in 2016, these percentages changed to 66% and 15%, respectively. Fewer audiologists also work in rural areas; 7% worked in rural areas in 2016 compared to 8% in 2013.

In 2013, 38% of all audiologists expected to retire by the age of 65, but this percentage had increased to 40% in 2016. For those who are age 50 or over, the same 29% planned on retiring by the age of 65 in 2013 and 2016. In addition, while 18% of all audiologists expected to retire in the next 10 years in 2013, 21% reported the same expectation in 2016.

A Closer Look:

Licensee Counts		
License Status	#	%
Renewing Practitioners	453	86%
New Licensees	33	6%
Non-Renewals	40	8%
All Licensees	526	100%

Source: Va. Healthcare Workforce Data Center

HWDC surveys tend to achieve very high response rates. 90% of renewing audiologists submitted a survey. These represent 79% of audiologists who held a license at some point in 2016.

Statistic	Response Rates		Response Rate
	Non Respondents	Respondent	
By Age			
Under 30	16	15	48%
30 to 34	26	55	68%
35 to 39	11	45	80%
40 to 44	10	62	86%
45 to 49	6	53	90%
50 to 54	9	49	85%
55 to 59	12	60	83%
60 and Over	19	78	80%
Total	109	417	79%
New Licenses			
Issued in 2016	17	16	48%
Metro Status			
Non-Metro	8	24	75%
Metro	73	301	81%
Not in Virginia	28	92	77%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Licensed Audiologists

Number: 526
 New: 6%
 Not Renewed: 8%

Survey Response Rates

All Licensees: 79%
 Renewing Practitioners: 90%

Source: Va. Healthcare Workforce Data Center

Response Rates	
Completed Surveys	417
Response Rate, all licensees	79%
Response Rate, Renewals	90%

Source: Va. Healthcare Workforce Data Center

Definitions

- The Survey Period:** The survey was conducted in December 2016.
- Target Population:** All audiologists who held a Virginia license at some point in 2016.
- Survey Population:** The survey was available to those who renewed their licenses online. It was not available to those who did not renew, including some audiologists newly licensed in 2016.

At a Glance:

Workforce

2016 Audiologist Workforce: 406
 FTEs: 356

Utilization Ratios

Licensees in VA Workforce: 77%
 Licensees per FTE: 1.48
 Workers per FTE: 1.14

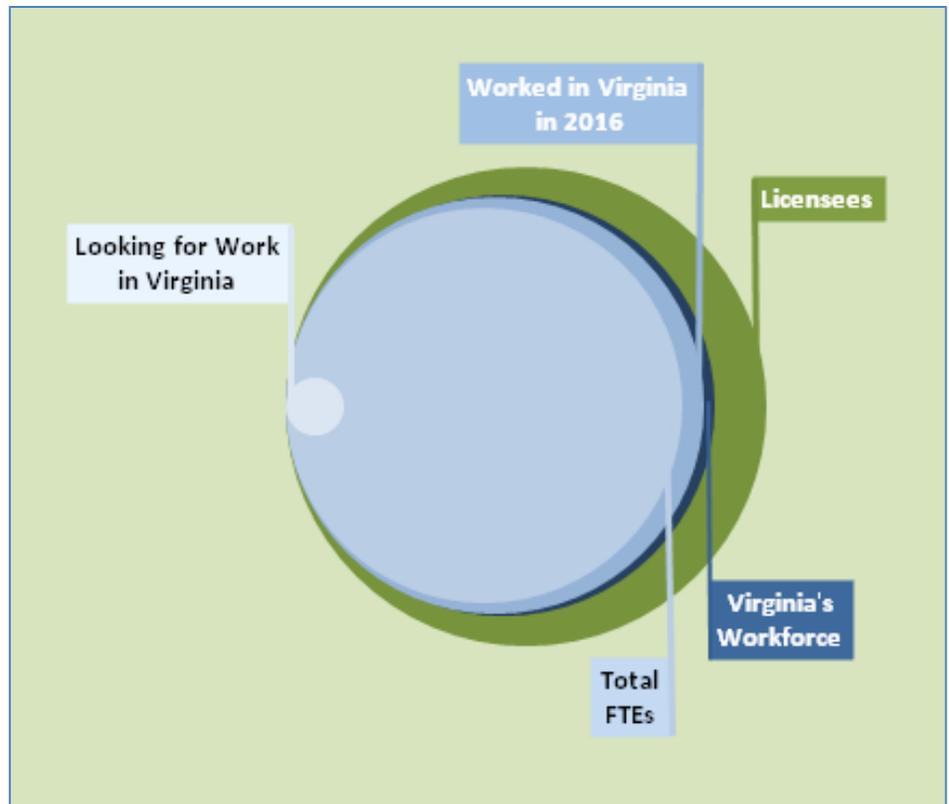
Source: Va. Healthcare Workforce Data Center

Definitions

- 1. Virginia's Workforce:** A licensee with a primary or secondary work site in Virginia at any time in the past year or who indicated intent to return to Virginia's workforce at any point in the future.
- 2. Full Time Equivalency Unit (FTE):** The HWDC uses 2,000 (40 hours for 50 weeks) as its baseline measure for FTEs.
- 3. Licensees in VA Workforce:** The proportion of licensees in Virginia's Workforce.
- 4. Licensees per FTE:** An indication of the number of licensees needed to create 1 FTE. Higher numbers indicate lower licensee participation.
- 5. Workers per FTE:** An indication of the number of workers in Virginia's workforce needed to create 1 FTE. Higher numbers indicate lower utilization of available workers.

Virginia's Audiologist Workforce		
Status	#	%
Worked in Virginia in Past Year	398	98%
Looking for Work in Virginia	8	2%
Virginia's Workforce	406	100%
Total FTEs	356	
Licensees	526	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

This report uses weighting to estimate the figures in this report. Unless otherwise noted, figures refer to the Virginia Workforce only. For more information on HWDC's methodology visit:

www.dhp.virginia.gov/hwdc

A Closer Look:

Age & Gender						
Age	Male		Female		Total	
	#	% Male	#	% Female	#	% in Age Group
Under 30	0	0%	27	100%	27	8%
30 to 34	3	5%	54	95%	57	16%
35 to 39	1	4%	30	96%	31	9%
40 to 44	5	10%	43	90%	48	14%
45 to 49	1	3%	36	97%	37	11%
50 to 54	12	29%	30	72%	41	12%
55 to 59	8	18%	38	82%	46	13%
60 +	12	20%	49	80%	61	17%
Total	42	12%	307	88%	349	100%

Source: Va. Healthcare Workforce Data Center

Race & Ethnicity					
Race/Ethnicity	Virginia*	Audiologists		Audiologists Under 40	
	%	#	%	#	%
White	63%	312	90%	102	88%
Black	19%	9	3%	1	1%
Asian	6%	8	2%	4	3%
Other Race	0%	3	1%	3	3%
Two or more races	2%	7	2%	3	3%
Hispanic	9%	9	3%	3	3%
Total	100%	348	100%	116	100%

*Population data in this chart is from the US Census, Annual Estimates of the Resident Population by Sex, Race, and Hispanic Origin for the United States, States, and Counties: July 1, 2014.

Source: Va. Healthcare Workforce Data Center

33% of audiologists are under the age of 40, and 97% of these professionals are female. In addition, audiologists who are under the age of 40 have a diversity index of 22%.

At a Glance:

Gender

% Female: 88%
 % Under 40 Female: 97%

Age

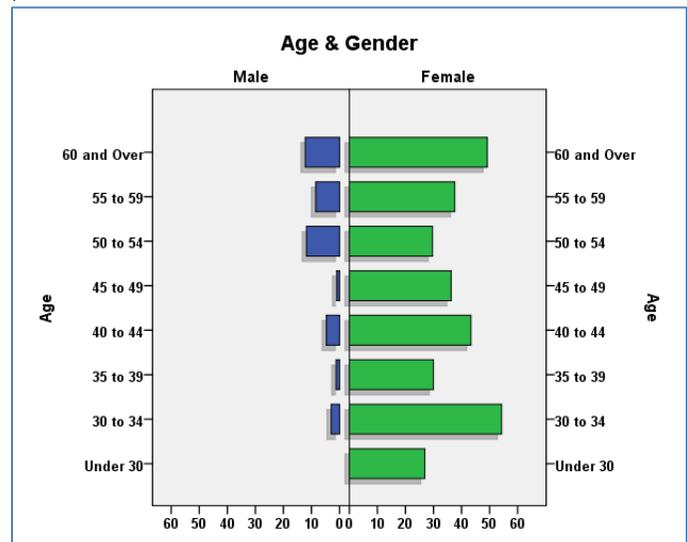
Median Age: 46
 % Under 40: 33%
 % 55+: 31%

Diversity

Diversity Index: 19%
 Under 40 Div. Index: 22%

Source: Va. Healthcare Workforce Data Center

In a chance encounter between two audiologists, there is a 19% chance that they would be of a different race/ethnicity (a measure known as the Diversity Index. For Virginia's population as a whole, the comparable number is 55%.



Source: Va. Healthcare Workforce Data Center

At a Glance:

Childhood

Urban Childhood: 8%
 Rural Childhood: 27%

Virginia Background

HS in Virginia: 39%
 Prof. Education in VA: 31%
 HS/Prof. Educ. in VA: 47%

Location Choice

% Rural to Non-Metro: 15%
 % Urban/Suburban to Non-Metro: 4%

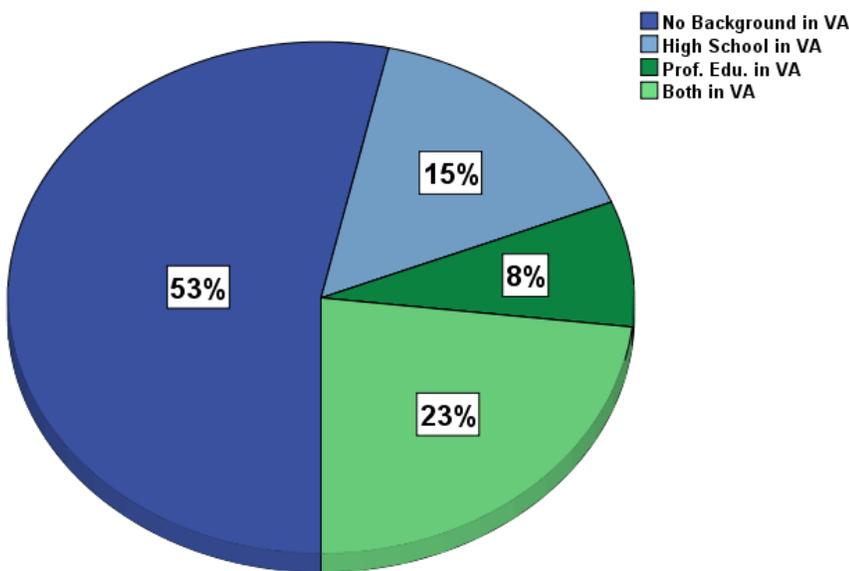
Source: Va. Healthcare Workforce Data Center

A Closer Look:

Primary Location: USDA Rural Urban Continuum		Rural Status of Childhood Location		
Code	Description	Rural	Suburban	Urban
Metro Counties				
1	Metro, 1 million+	20%	73%	8%
2	Metro, 250,000 to 1 million	37%	56%	7%
3	Metro, 250,000 or less	41%	50%	9%
Non-Metro Counties				
4	Urban pop 20,000+, Metro adj	67%	0%	33%
6	Urban pop, 2,500-19,999, Metro adj	67%	0%	33%
7	Urban pop, 2,500-19,999, nonadj	63%	38%	0%
8	Rural, Metro adj	0%	0%	0%
9	Rural, nonadj	50%	50%	0%
Overall		27%	65%	8%

Source: Va. Healthcare Workforce Data Center

Educational Background in Virginia



Source: Va. Healthcare Workforce Data Center

27% of audiologists grew up in self-described rural areas, and 15% of these professionals currently work in non-Metro counties. Overall, just 7% of all audiologists currently work in non-Metro counties.

Top Ten States for Audiologist Recruitment

Rank	All Professionals			
	High School	#	Professional School	#
1	Virginia	131	Virginia	105
2	Pennsylvania	27	Tennessee	29
3	New York	21	Washington, D.C.	27
4	Maryland	21	Pennsylvania	20
5	Ohio	15	Maryland	15
6	North Carolina	12	West Virginia	15
7	West Virginia	12	North Carolina	14
8	Michigan	11	New York	13
9	Outside U.S./Canada	10	Ohio	12
10	Mississippi	7	Michigan	10

Source: Va. Healthcare Workforce Data Center

39% of licensed audiologists received their high school degree in Virginia, and 31% received their initial professional degree in the state.

Rank	Licensed in the Past 5 Years			
	High School	#	Professional School	#
1	Virginia	19	Pennsylvania	12
2	Pennsylvania	13	Virginia	12
3	Ohio	7	Tennessee	10
4	Maryland	7	Washington, D.C.	7
5	New York	6	West Virginia	6
6	Mississippi	5	Maryland	5
7	North Carolina	4	Ohio	5
8	Georgia	4	Texas	4
9	Texas	3	Florida	4
10	Illinois	2	Mississippi	3

Source: Va. Healthcare Workforce Data Center

Among audiologists who received their license in the past five years, 23% received their high school degree in Virginia, while 14% received their initial professional degree in the state.

23% of licensed audiologists did not participate in Virginia's workforce in 2016. 89% of these audiologists worked at some point in the past year, and 86% are currently employed as audiologists.

At a Glance:

Not in VA Workforce

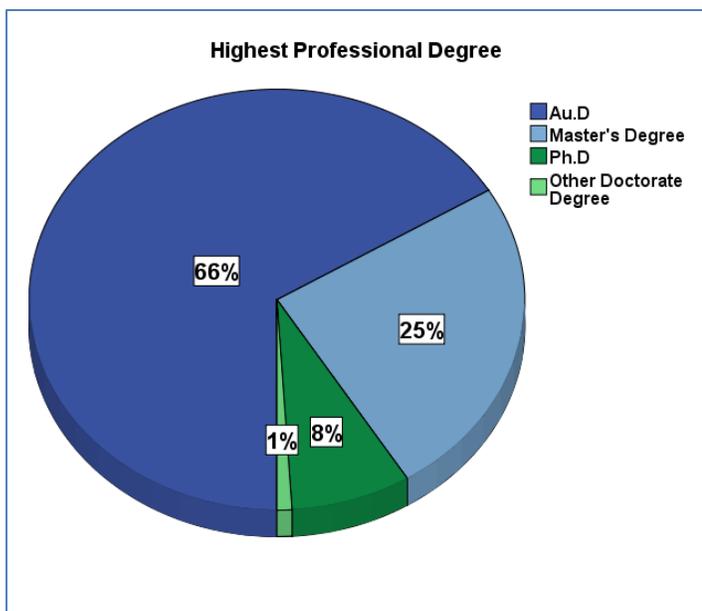
Total:	121
% of Licensees:	23%
Federal/Military:	14%
Va Border State/DC:	29%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Highest Professional Degree		
Degree	#	%
Master's Degree	85	25%
Au.D	227	66%
Ph.D	27	8%
Other Doctorate Degree	3	1%
Total	342	100%

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

33% of audiologists currently have educational debt, including 63% of those under the age of 40. For those with educational debt, the median outstanding balance on their loans is between \$50,000 and \$60,000.

At a Glance:

Education
 Doctor of Audiology: 66%
 Master's Degree: 25%

Educational Debt
 Carry debt: 33%
 Under age 40 w/ debt: 63%
 Median debt: \$50k-\$60k

Source: Va. Healthcare Workforce Data Center

66% of all audiologists hold a Doctorate of Audiology (Au.D.) as their highest professional degree.

Educational Debt				
Amount Carried	All Audiologists		Audiologists Under 40	
	#	%	#	%
None	191	67%	36	36%
Less than \$10,000	11	4%	4	4%
\$10,000-\$19,999	9	3%	1	1%
\$20,000-\$29,999	10	4%	6	6%
\$30,000-\$39,999	6	2%	3	3%
\$40,000-\$49,999	7	2%	5	5%
\$50,000-\$59,999	3	1%	3	3%
\$60,000-\$69,999	9	3%	6	6%
\$70,000-\$79,999	11	4%	10	10%
\$80,000-\$89,999	4	1%	4	4%
\$90,000-\$99,999	8	3%	8	8%
\$100,000 or more	16	6%	12	12%
Total	285	100%	99	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Top Specialties

Hearing Aids/Devices:	56%
Pediatrics:	25%
Geriatrics:	23%

Top Credentials

CCC-A Audiology:	69%
Hearing Aid Disp. License:	54%
F-AAA Fellow:	42%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Self-Designated Specialties		
Specialty	#	% of Workforce
Hearing Aids/Devices	227	56%
Pediatrics	103	25%
Geriatrics	94	23%
Vestibular	80	20%
Educational	57	14%
Cochlear Implants	39	10%
Occupational Hearing Conservation	36	9%
Intraoperative Monitoring	4	1%
Other	30	7%
At Least One Specialty	284	70%

Source: Va. Healthcare Workforce Data Center

Credentials		
Credential	#	% of Workforce
CCC-A: Audiology	281	69%
Hearing Aid Dispenser License	218	54%
F-AAA Fellow	169	42%
ABA Certification	15	4%
CCC_SLP: Speech-Language Pathology	10	2%
PASC: Pediatric Audiology	4	1%
CI: Cochlear Implants	1	0%
BCS-IOM: Intraoperative Monitoring	0	0%
Other	7	2%
At Least One Credential	340	84%

Source: Va. Healthcare Workforce Data Center

70% of all audiologists have at least one self-designated specialty, while 84% have at least one credential as well.

At a Glance:

Employment

Employed in Profession: 95%
Involuntarily Unemployed: 0%

Positions Held

1 Full-time: 73%
2 or More Positions: 9%

Weekly Hours:

40 to 49: 53%
60 or more: 3%
Less than 30: 11%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Current Work Status		
Status	#	%
Employed, capacity unknown	0	0%
Employed in an audiologist-related capacity	325	95%
Employed, NOT in an audiologist-related capacity	5	1%
Not working, reason unknown	0	0%
Involuntarily unemployed	0	0%
Voluntarily unemployed	7	2%
Retired	6	2%
Total	343	100%

Source: Va. Healthcare Workforce Data Center

95% of Virginia's audiologists are currently employed in the profession. 73% have one full-time job, and 53% work between 40 and 49 hours per week.

Current Positions		
Positions	#	%
No Positions	13	4%
One Part-Time Position	50	15%
Two Part-Time Positions	8	2%
One Full-Time Position	246	73%
One Full-Time Position & One Part-Time Position	17	5%
Two Full-Time Positions	1	0%
More than Two Positions	4	1%
Total	339	100%

Source: Va. Healthcare Workforce Data Center

Current Weekly Hours		
Hours	#	%
0 hours	13	4%
1 to 9 hours	2	1%
10 to 19 hours	9	3%
20 to 29 hours	27	8%
30 to 39 hours	68	20%
40 to 49 hours	179	53%
50 to 59 hours	28	8%
60 to 69 hours	5	1%
70 to 79 hours	2	1%
80 or more hours	3	1%
Total	336	100%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Income		
Hourly Wage	#	%
Volunteer Work Only	0	0%
Less than \$20,000	11	5%
\$20,000-\$29,999	6	2%
\$30,000-\$39,999	7	3%
\$40,000-\$49,999	12	5%
\$50,000-\$59,999	16	7%
\$60,000-\$69,999	50	20%
\$70,000-\$79,999	40	16%
\$80,000-\$89,999	42	17%
\$90,000-\$99,999	20	8%
\$100,000-\$109,999	14	6%
\$110,000-\$119,999	3	1%
\$120,000 or more	25	10%
Total	247	100%

Source: Va. Healthcare Workforce Data Center

Job Satisfaction		
Level	#	%
Very Satisfied	246	75%
Somewhat Satisfied	74	23%
Somewhat Dissatisfied	5	1%
Very Dissatisfied	4	1%
Total	328	100%

Source: Va. Healthcare Workforce Data Center

Employer-Sponsored Benefits			
Benefit	#	%	% of Wage/Salary Employees
Paid Vacation	213	66%	75%
Retirement	202	62%	70%
Paid Sick Leave	190	58%	66%
Health Insurance	174	54%	60%
Dental Insurance	137	42%	50%
Group Life Insurance	96	30%	38%
Signing/Retention Bonus	14	4%	5%
At Least One Benefit	240	74%	83%

*From any employer at time of survey.

Source: Va. Healthcare Workforce Data Center

At a Glance:

Hourly Earnings

Median Income: \$70k-80k

Benefits

Health Insurance: 60%

Retirement: 70%

Satisfaction

Satisfied: 98%

Very Satisfied: 75%

Source: Va. Healthcare Workforce Data Center

The typical audiologist earns between \$70,000 and \$80,000 in the past year. Among audiologists who receive either an hourly wage or salary as compensation at their primary work location, 70% have an employer-sponsored retirement plan and 60% receive health insurance.

A Closer Look:

Underemployment in Past Year		
In the past year did you . . . ?	#	%
Experience Involuntary Unemployment?	5	1%
Experience Voluntary Unemployment?	16	4%
Work Part-time or temporary positions, but would have preferred a full-time/permanent position?	2	0%
Work two or more positions at the same time?	34	8%
Switch employers or practices?	22	5%
Experienced at least one	69	17%

Source: Va. Healthcare Workforce Data Center

Only 1% of Virginia’s audiologists were involuntary unemployed at some point in 2016. For comparison, Virginia’s average monthly unemployment rate was 4.0%.¹

Location Tenure				
Tenure	Primary		Secondary	
	#	%	#	%
Not Currently Working at this Location	8	2%	3	5%
Less than 6 Months	16	5%	6	9%
6 Months to 1 Year	17	5%	3	5%
1 to 2 Years	72	22%	14	22%
3 to 5 Years	44	14%	16	25%
6 to 10 Years	64	20%	9	14%
More than 10 Years	101	31%	14	22%
Subtotal	322	100%	65	100%
Did not have location	10		340	
Item Missing	74		0	
Total	406		406	

Source: Va. Healthcare Workforce Data Center

65% of audiologists receive a salary or commission at their primary work location, while 19% each receive an hourly wage.

At a Glance:

Unemployment Experience

Involuntarily Unemployed: 1%
Underemployed: 0%

Turnover & Tenure

Switched: 5%
New Location: 13%
Over 2 years: 65%
Over 2 yrs, 2nd location: 60%

Employment Type

Salary/Commission: 65%
Hourly Wage: 19%

Source: Va. Healthcare Workforce Data Center

65% of audiologists have worked at their primary location for more than 2 years—the job tenure normally required to get a conventional mortgage loan.

Employment Type		
Primary Work Site	#	%
Salary/Commission	162	65%
Hourly Wage	48	19%
Business/Practice Income	29	12%
By Contract/Per Diem	7	3%
Unpaid	2	1%
Subtotal	249	100%

Source: Va. Healthcare Workforce Data Center

¹ As reported by the US Bureau of Labor Statistics. The non-seasonally adjusted monthly unemployment rate ranged from 4.4% in January to 4.0% in November. At the time of publication, results from November were still preliminary and results from December had not yet been reported.

At a Glance:

Concentration

Top Region:	38%
Top 3 Regions:	74%
Lowest Region:	1%

Locations

2 or more (2016):	19%
2 or more (Now*):	19%

Source: Va. Healthcare Workforce Data Center

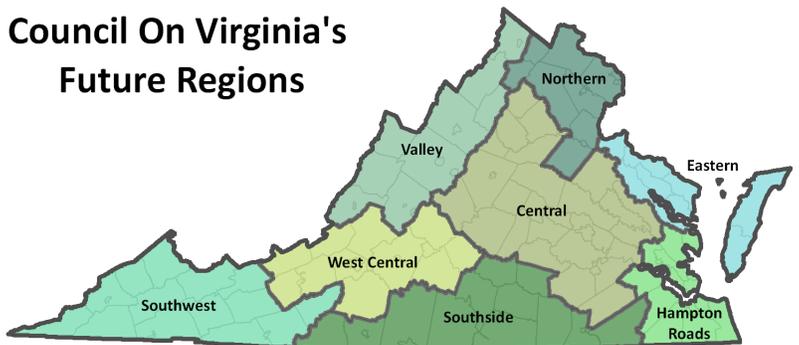
38% of audiologists work in Northern Virginia, the most of any region in the state. In addition, another 19% of audiologists work in Hampton Roads, while 17% work in Central Virginia.

A Closer Look:

Regional Distribution of Work Locations				
COVF Region	Primary Location		Secondary Location	
	#	%	#	%
Central	55	17%	7	11%
Eastern	4	1%	0	0%
Hampton Roads	60	19%	12	19%
Northern	123	38%	26	41%
Southside	9	3%	4	6%
Southwest	17	5%	0	0%
Valley	20	6%	5	8%
West Central	28	9%	2	3%
Virginia Border State/DC	4	1%	3	5%
Other US State	0	0%	5	8%
Outside of the US	0	0%	0	0%
Total	320	100%	64	100%
Item Missing	76		0	

Source: Va. Healthcare Workforce Data Center

Council On Virginia's Future Regions



19% of audiologists currently have multiple work locations, while 19% have also had multiple work locations in 2016.

Locations	Number of Work Locations			
	Work Locations in 2016		Work Locations Now*	
	#	%	#	%
0	8	2%	14	4%
1	256	78%	252	77%
2	39	12%	38	12%
3	20	6%	20	6%
4	2	1%	2	1%
5	1	0%	1	0%
6 or More	0	0%	0	0%
Total	327	100%	327	100%

*At the time of survey completion, December 2016.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Sector	Location Sector			
	Primary Location		Secondary Location	
	#	%	#	%
For-Profit	196	66%	51	84%
Non-Profit	46	15%	5	8%
State/Local Government	35	12%	1	2%
Veterans Administration	12	4%	3	5%
U.S. Military	8	3%	1	2%
Other Federal Gov't	0	0%	0	0%
Total	297	100%	61	100%
Did not have location	10		340	
Item Missing	99		5	

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Sector

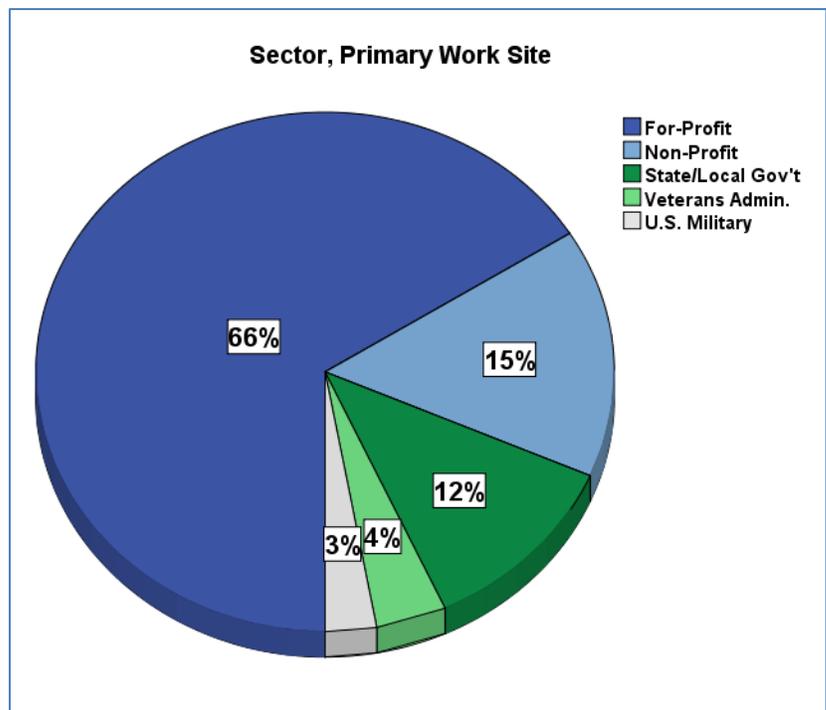
For Profit:	66%
Federal:	7%

Top Establishments

Private Practice (Group):	22%
Physician's Office:	21%
Private Practice (Solo):	17%

Source: Va. Healthcare Workforce Data Center

81% of audiologists work in the private sector, including 66% who work at for-profit establishments. Another 12% of Virginia's audiologist workforce works with either a state or local government.

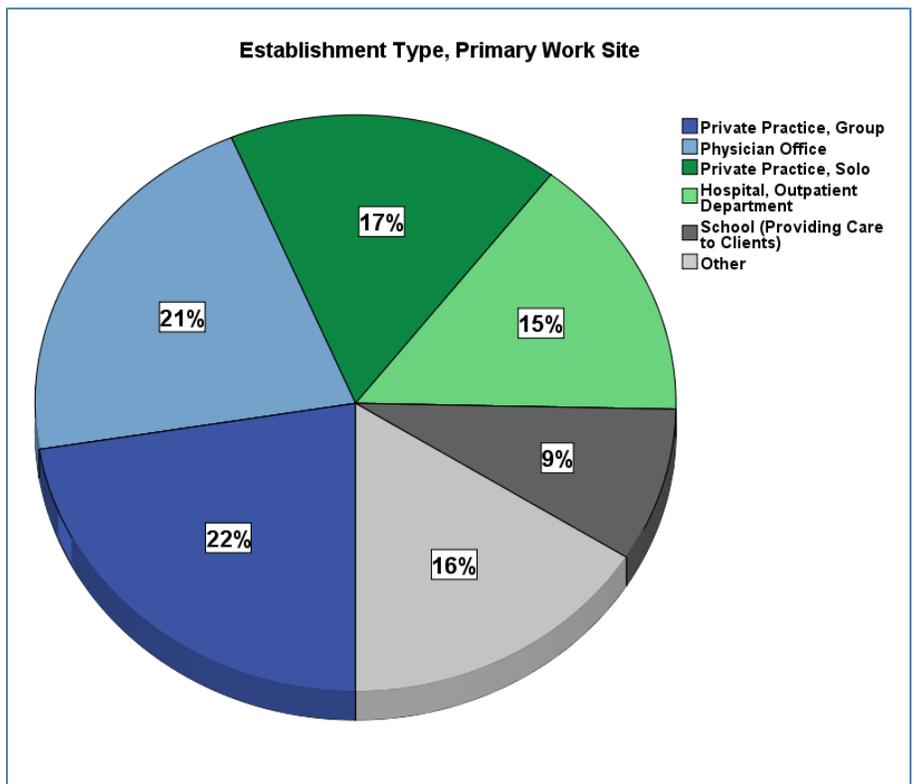


Source: Va. Healthcare Workforce Data Center

Top 10 Location Type				
Establishment Type	Primary Location		Secondary Location	
	#	%	#	%
Private Practice, Group	65	22%	20	33%
Physician Office	62	21%	14	23%
Private Practice, Solo	49	17%	9	15%
Hospital, Outpatient Department	43	15%	11	18%
School (Providing Care to Clients)	25	9%	1	2%
Community-Based Clinic or Health Center	11	4%	1	2%
Academic Institution (Teaching Health Professions Students or Research)	8	3%	2	3%
Administrative/Business Organization	7	2%	1	2%
Hospital, Inpatient Department	3	1%	0	0%
Rehabilitation Facility	2	1%	0	0%
Child Day Care	1	0%	0	0%
Other	15	5%	1	2%
Total	291	100%	60	100%
Did Not Have a Location	10		340	

22% of all audiologists in the state work in group private practices. Another 21% work in physician offices.

Source: Va. Healthcare Workforce Data Center



Among those audiologists who also have a secondary work location, 33% work in group private practices, while 23% work in physician offices.

Source: Va. Healthcare Workforce Data Center

At a Glance: (Primary Locations)

Typical Time Allocation

Client Care: 80%-89%
Administration: 10%-19%

Roles

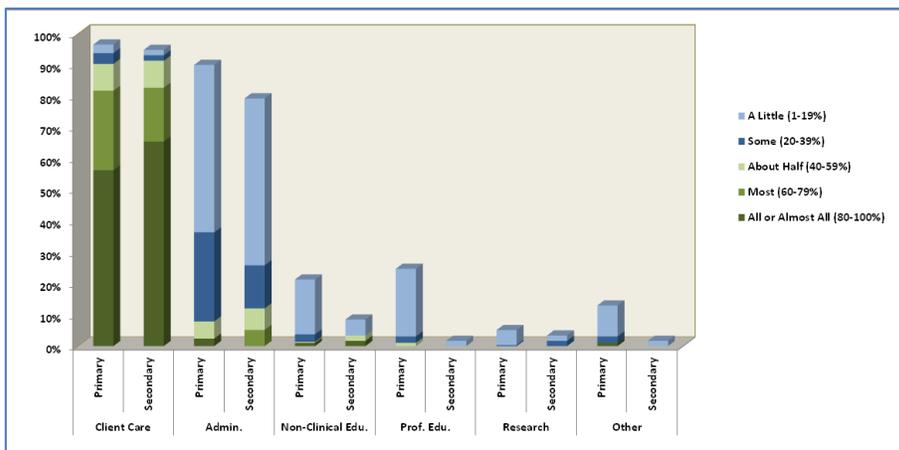
Patient Care: 82%
Administration: 2%
Non-Clinical Edu.: 1%

Patient Care Audiologists

Median Admin Time: 10%-19%
Ave. Admin Time: 10%-19%

Source: Va. Healthcare Workforce Data Center

A Closer Look:



Source: Va. Healthcare Workforce Data Center

A typical audiologist spends most of her time in client care activities. 82% of audiologists fill a client care role, defined as spending at least 60% of their time in that activity.

Time Allocation												
Time Spent	Client Care		Admin.		Non-Clinical Education		Professional Education		Research		Other	
	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site	Prim Site	Sec. Site
All or Almost All (80-100%)	56%	63%	2%	0%	1%	2%	0%	0%	0%	0%	1%	0%
Most (60-79%)	25%	17%	0%	5%	0%	0%	0%	0%	0%	0%	0%	0%
About Half (40-59%)	9%	8%	5%	7%	0%	2%	1%	0%	0%	0%	0%	0%
Some (20-39%)	3%	2%	28%	13%	2%	0%	2%	0%	0%	2%	2%	0%
A Little (1-20%)	3%	2%	53%	52%	17%	5%	22%	2%	5%	2%	10%	2%
None (0%)	3%	5%	10%	20%	78%	90%	75%	97%	95%	95%	87%	97%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Weekly Session Totals

(Median)

Primary Location: 30-39

Secondary Location: 10-19

Total: 30-39

% with Group Sessions

Primary Location: 8%

Secondary Location: 3%

Source: Va. Healthcare Workforce Data Center

A Closer Look:

Client Sessions / Week	Primary Work Location		Secondary Work Location		Total ²	
	#	%	#	%	#	%
None	17	6%	13	21%	17	6%
1-9	29	10%	21	33%	26	9%
10-19	44	15%	21	33%	36	12%
20-29	45	15%	5	8%	42	14%
30-39	74	25%	1	2%	70	23%
40-49	37	12%	1	2%	45	15%
50-59	31	10%	1	2%	33	11%
60-69	11	4%	0	0%	11	4%
70-79	2	1%	0	0%	8	3%
80 or more	12	4%	0	0%	15	5%
Total	302	100%	63	100%	303	100%

Source: Va. Healthcare Workforce Data Center

The typical audiologist has between 30 and 39 client sessions per week at their primary work location. In addition, audiologists who also have a secondary work location conduct an additional 10 to 19 client sessions per week.

# of Weekly Sessions	Primary Work Location				Secondary Work Location			
	Individual Sessions		Group Sessions		Individual Sessions		Group Sessions	
	#	%	#	%	#	%	#	%
None	17	6%	275	92%	13	21%	60	97%
1-9	33	11%	22	7%	21	33%	1	2%
10-19	49	16%	2	1%	21	33%	1	2%
20-29	49	16%	0	0%	6	10%	0	0%
30-39	74	24%	0	0%	1	2%	0	0%
40-49	37	12%	0	0%	1	2%	0	0%
50-59	26	9%	0	0%	0	0%	0	0%
60-69	11	4%	0	0%	0	0%	0	0%
70-79	0	0%	0	0%	0	0%	0	0%
80 or more	7	2%	0	0%	0	0%	0	0%
Total	304	100%	299	100%	63	100%	62	100%

Source: Va. Healthcare Workforce Data Center

² This column estimates the total number of client sessions across both primary and secondary work locations.

A Closer Look:

Retirement Expectations				
Expected Retirement Age	All		Over 50	
	#	%	#	%
Under age 50	6	2%	-	-
50 to 54	9	3%	0	0%
55 to 59	21	8%	6	6%
60 to 64	72	27%	25	23%
65 to 69	102	38%	40	37%
70 to 74	29	11%	17	16%
75 to 79	3	1%	3	3%
80 or over	4	1%	1	1%
I do not intend to retire	22	8%	15	14%
Total	267	100%	107	100%

Source: Va. Healthcare Workforce Data Center

At a Glance:

Retirement Expectations

All Audiologists

Under 65: 40%

Under 60: 13%

Audiologists 50 and over

Under 65: 29%

Under 60: 6%

Time until Retirement

Within 2 years: 4%

Within 10 years: 21%

Half the workforce: by 2041

Source: Va. Healthcare Workforce Data Center

40% of all audiologists expect to retire by the age of 65, including 29% of those who have already reached age 50 or over. Another 22% of all audiologists do not expect to retire until at least age 70.

Within the next two years, 9% of audiologists expect to pursue additional educational opportunities. In addition, 8% of audiologists also plan to increase client care hours.

Future Plans

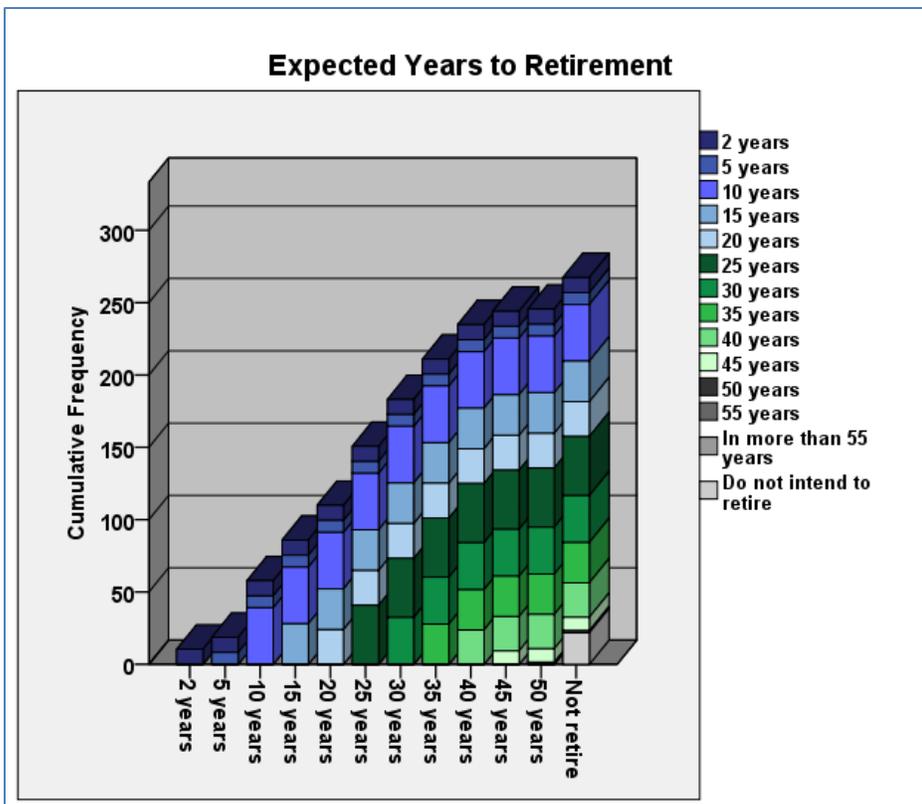
2 Year Plans:	#	%
Decrease Participation		
Leave Profession	7	2%
Leave Virginia	11	3%
Decrease Client Care Hours	16	4%
Decrease Teaching Hours	1	0%
Increase Participation		
Increase Client Care Hours	32	8%
Increase Teaching Hours	15	4%
Pursue Additional Education	35	9%
Return to Virginia's Workforce	1	0%

Source: Va. Healthcare Workforce Data Center

By comparing retirement expectation to age, we can estimate the maximum years to retirement for audiologists. Only 4% of audiologists plan on retiring in the next two years, while 21% plan on retiring in the next ten years. Half of the current audiologist workforce expects to be retired by 2041.

Time to Retirement			
Expect to retire within. . .	#	%	Cumulative %
2 years	10	4%	4%
5 years	8	3%	7%
10 years	39	15%	21%
15 years	28	10%	32%
20 years	24	9%	41%
25 years	41	15%	56%
30 years	32	12%	68%
35 years	28	10%	79%
40 years	24	9%	88%
45 years	9	3%	91%
50 years	1	0%	91%
55 years	0	0%	91%
In more than 55 years	0	0%	91%
Do not intend to retire	22	8%	100%
Total	267	100%	

Source: Va. Healthcare Workforce Data Center



Source: Va. Healthcare Workforce Data Center

Using these estimates, retirements will begin to reach 10% of the current workforce every five years starting in 2026. Retirements will peak at 15% of the current workforce around 2041 before declining to under 10% of the current workforce again around 2056.

At a Glance:

FTEs

Total: 356
 FTEs/1,000 Residents: 0.043
 Average: 0.90

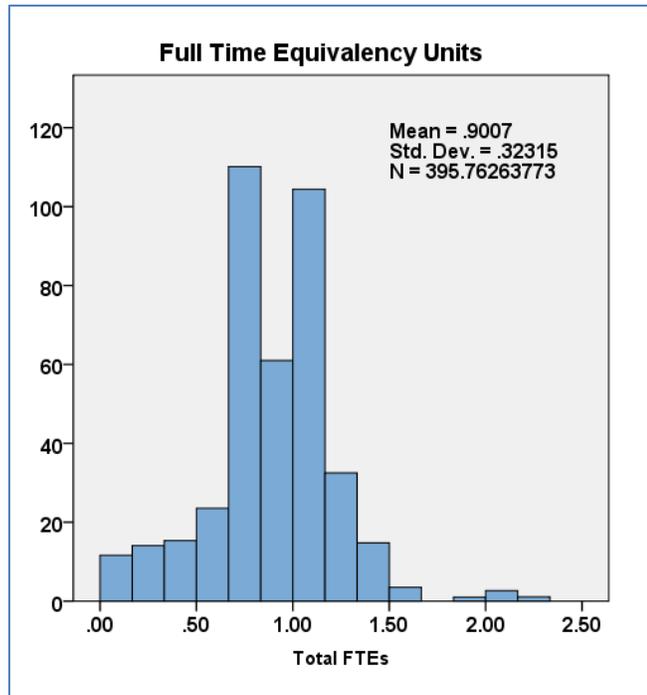
Age & Gender Effect

Age, Partial Eta²: Medium
 Gender, Partial Eta²: Small

Partial Eta² Explained:
 Partial Eta² is a statistical measure of effect size.

Source: Va. Healthcare Workforce Data Center

A Closer Look:

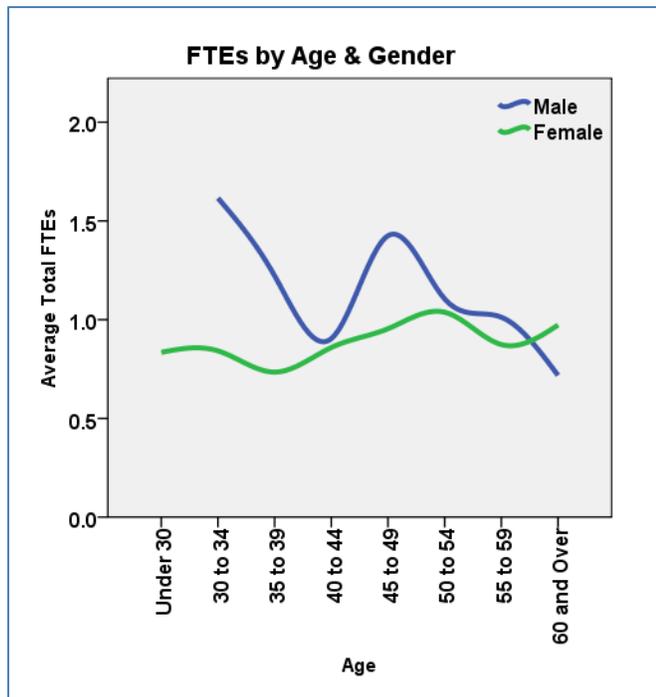


Source: Va. Healthcare Workforce Data Center

The typical audiologist provided 0.92 FTEs in 2016, or about 37 hours per week for 50 weeks. Although FTEs appear to vary by both age and gender, statistical tests did not verify that a difference exists.³

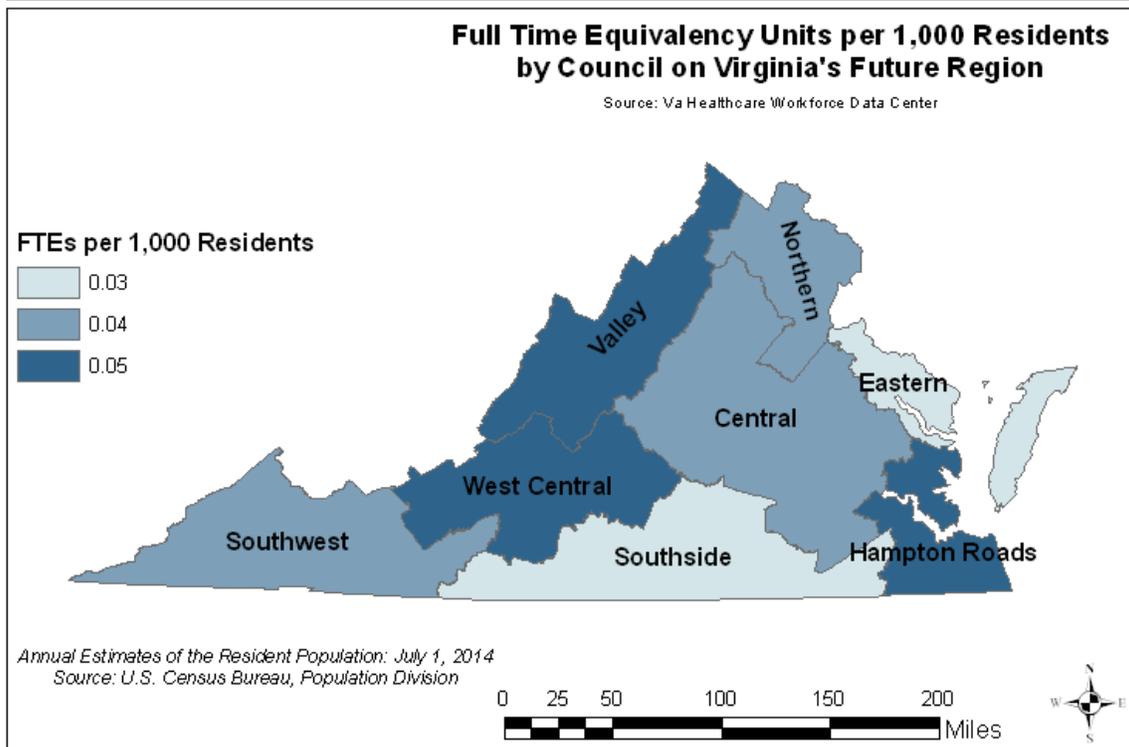
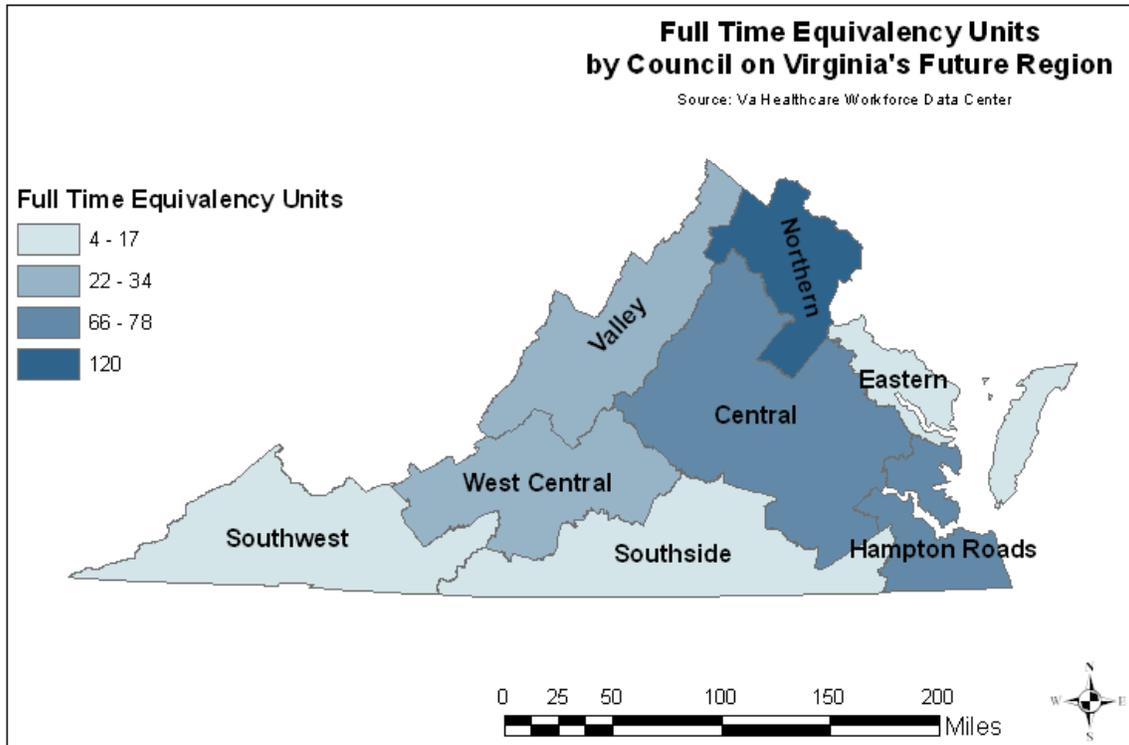
Full-Time Equivalency Units		
	Average	Median
Age		
Under 30	0.83	0.96
30 to 34	0.88	0.96
35 to 39	0.77	0.83
40 to 44	0.86	0.83
45 to 49	0.94	0.83
50 to 54	1.07	1.09
55 to 59	0.89	0.83
60 and Over	0.92	0.89
Gender		
Male	1.01	1.09
Female	0.89	0.96

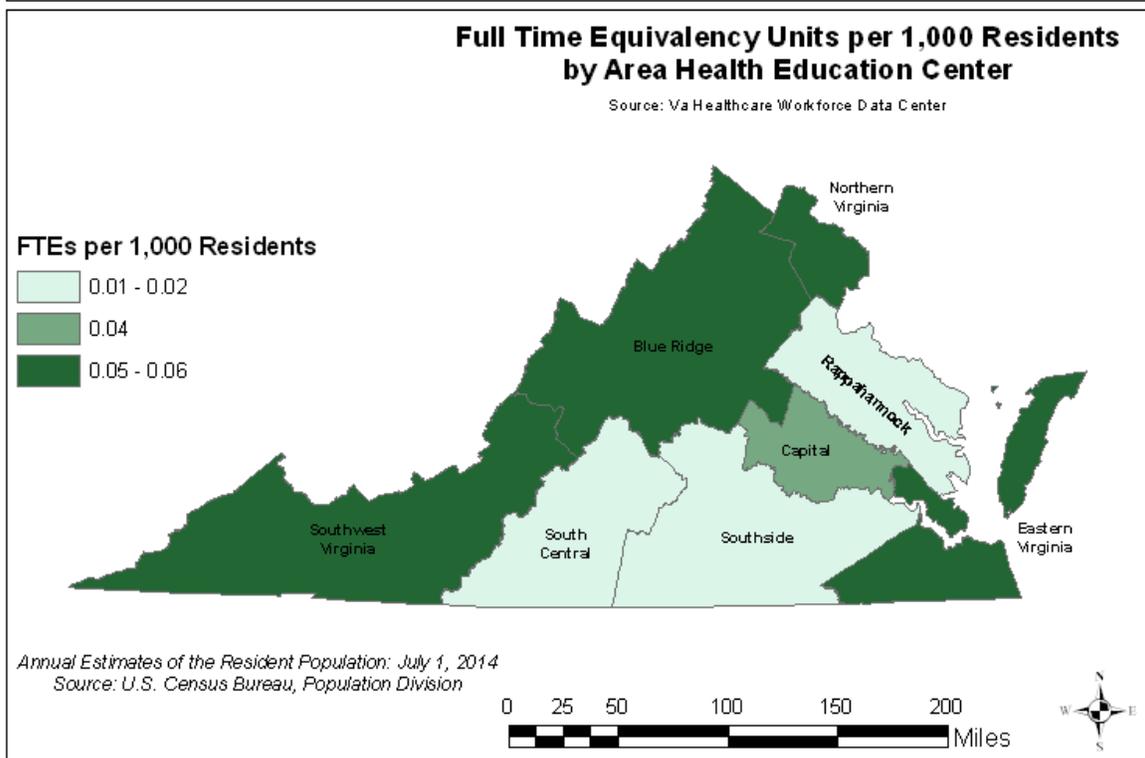
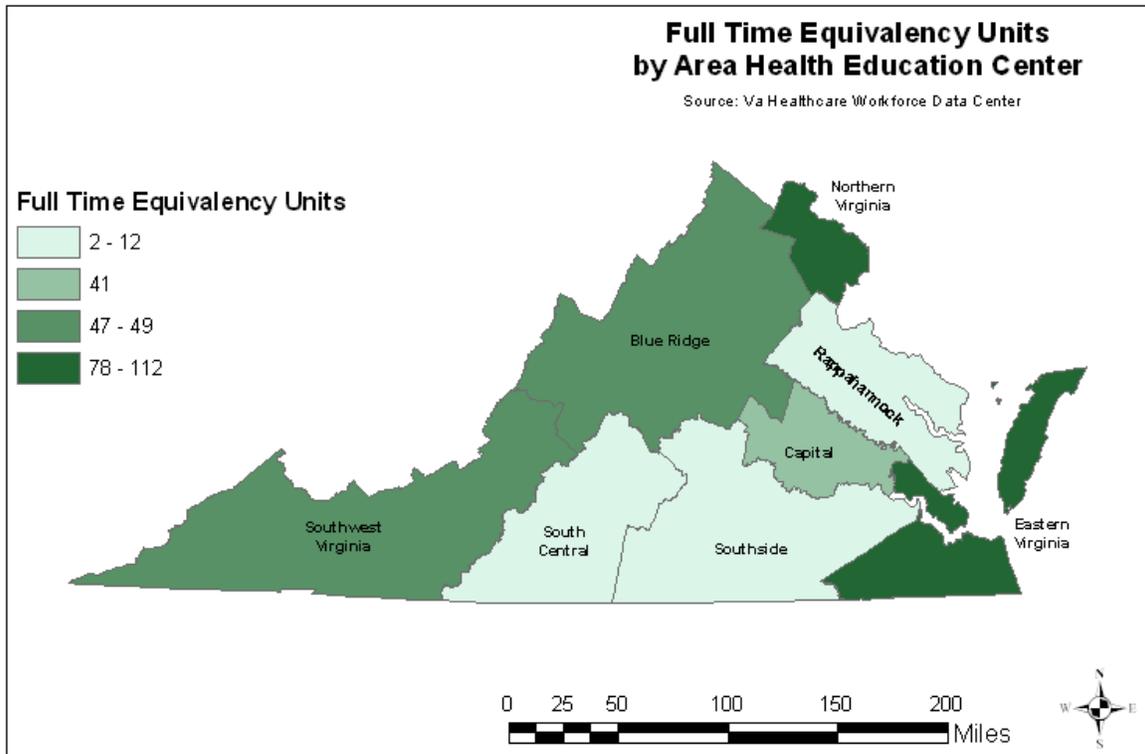
Source: Va. Healthcare Workforce Data Center

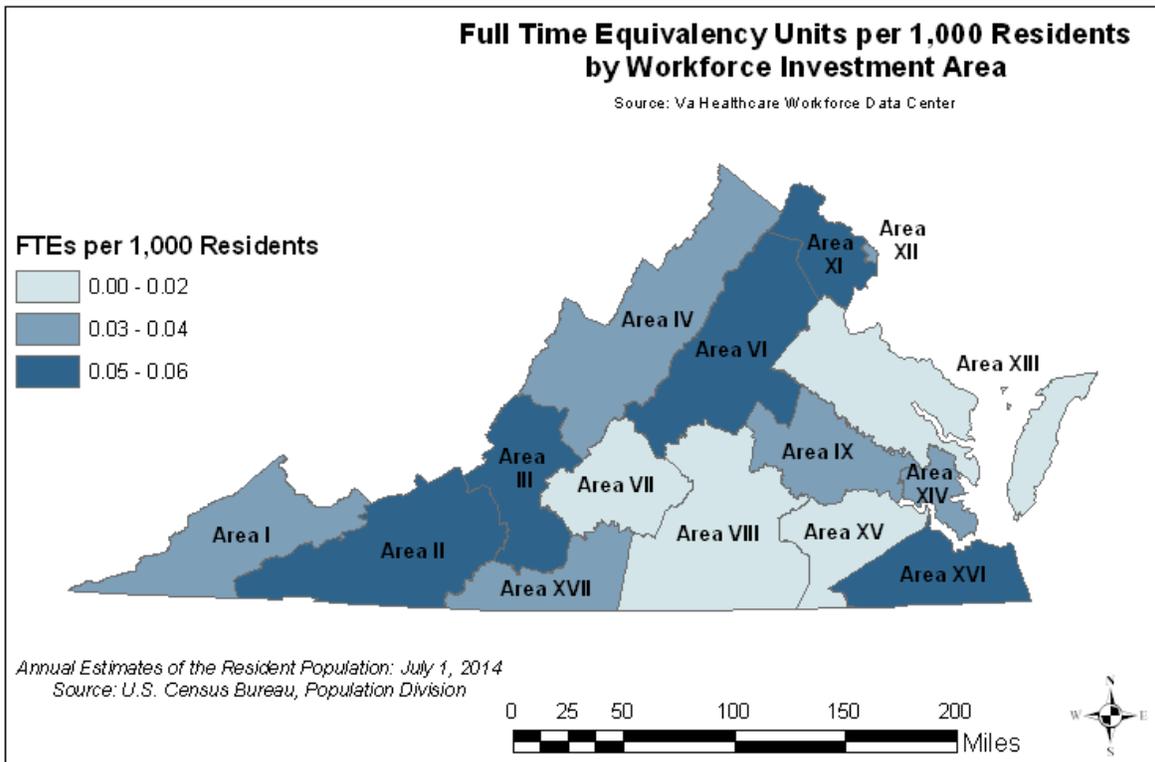
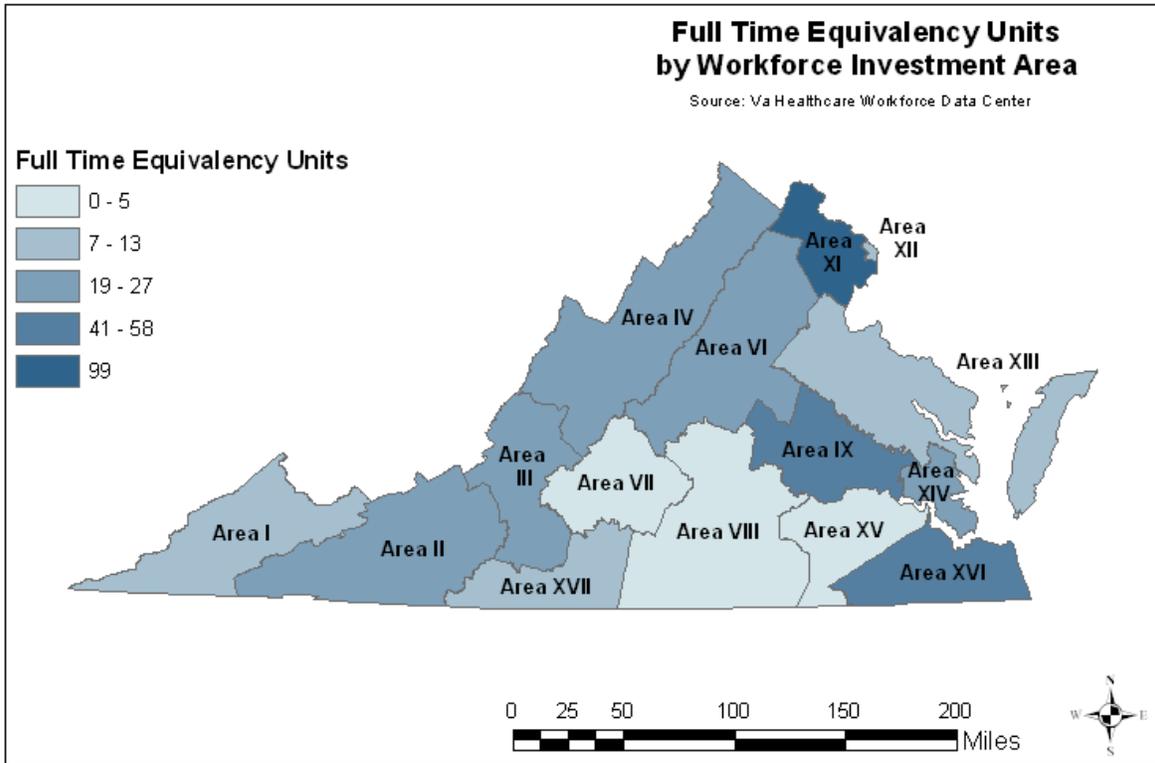


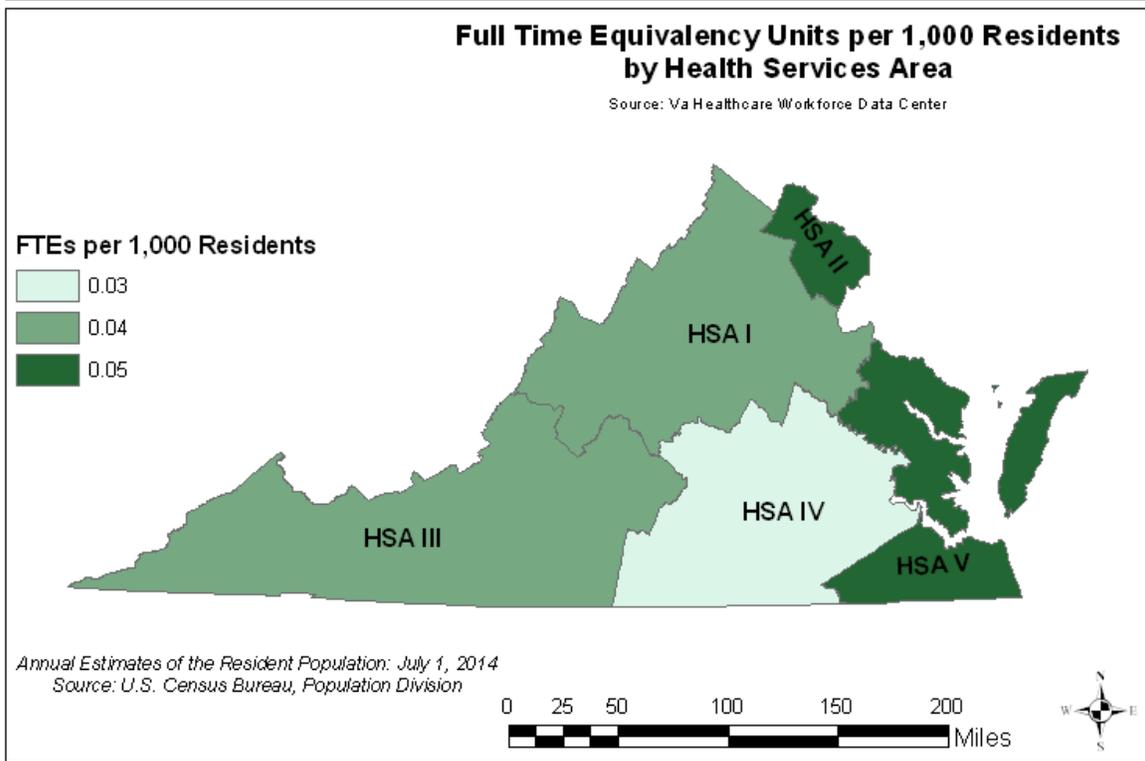
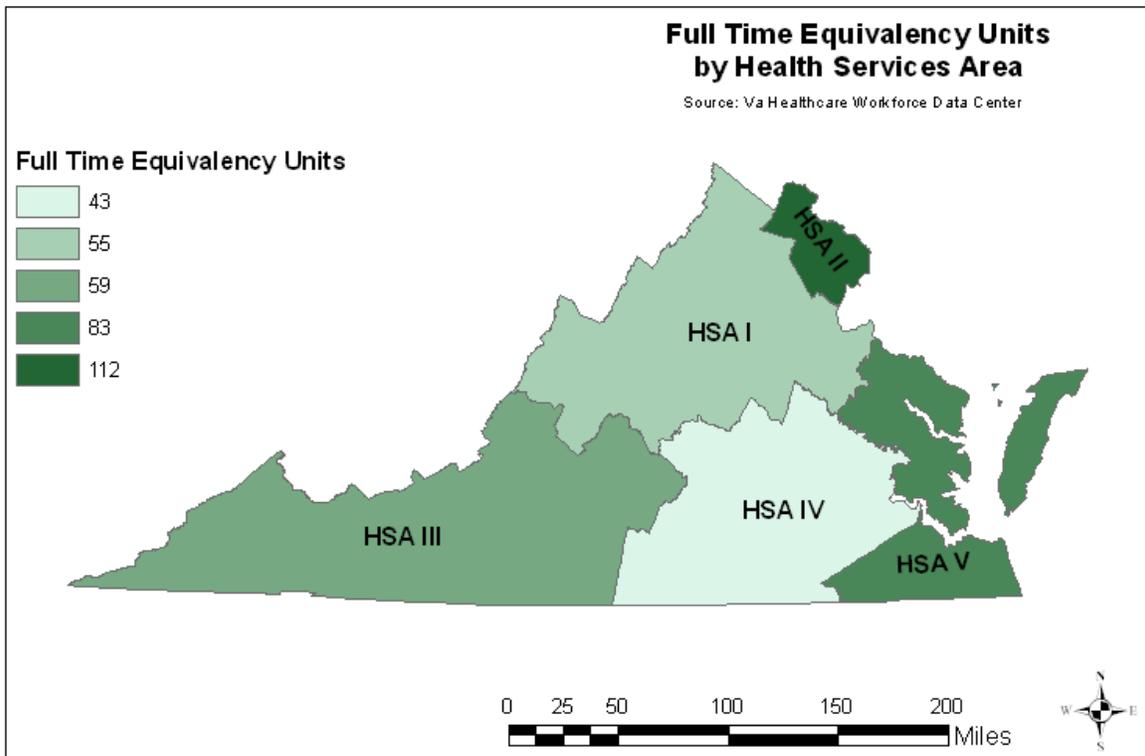
Source: Va. Healthcare Workforce Data Center

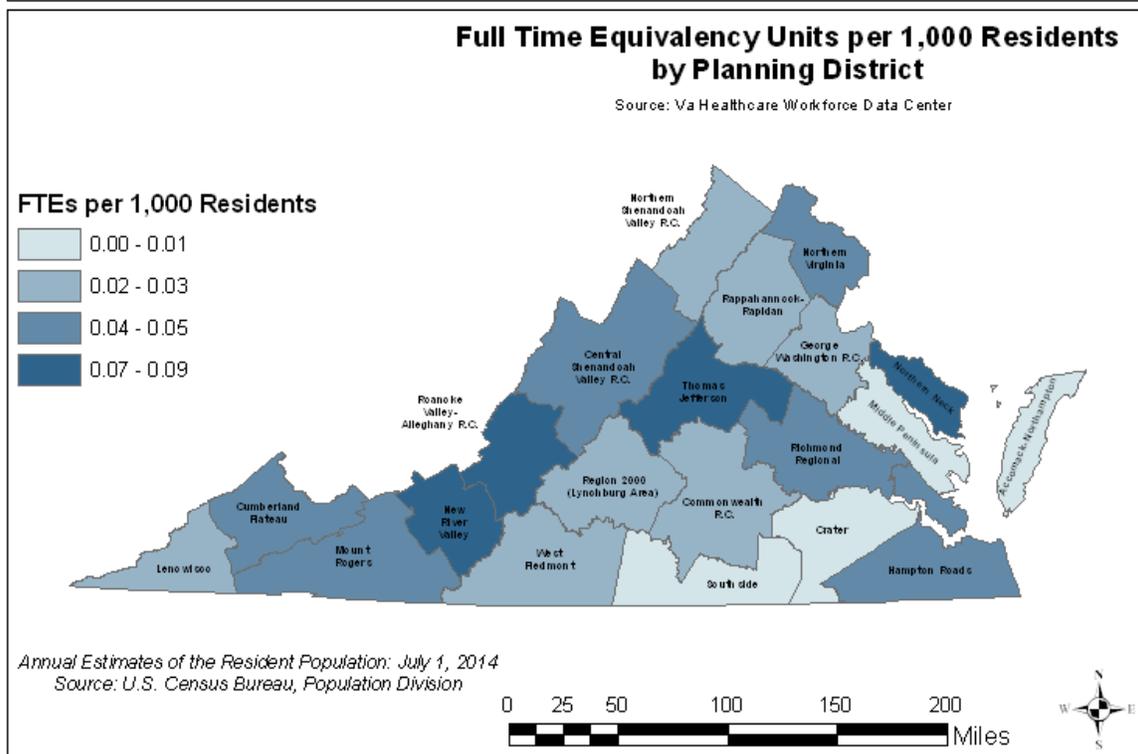
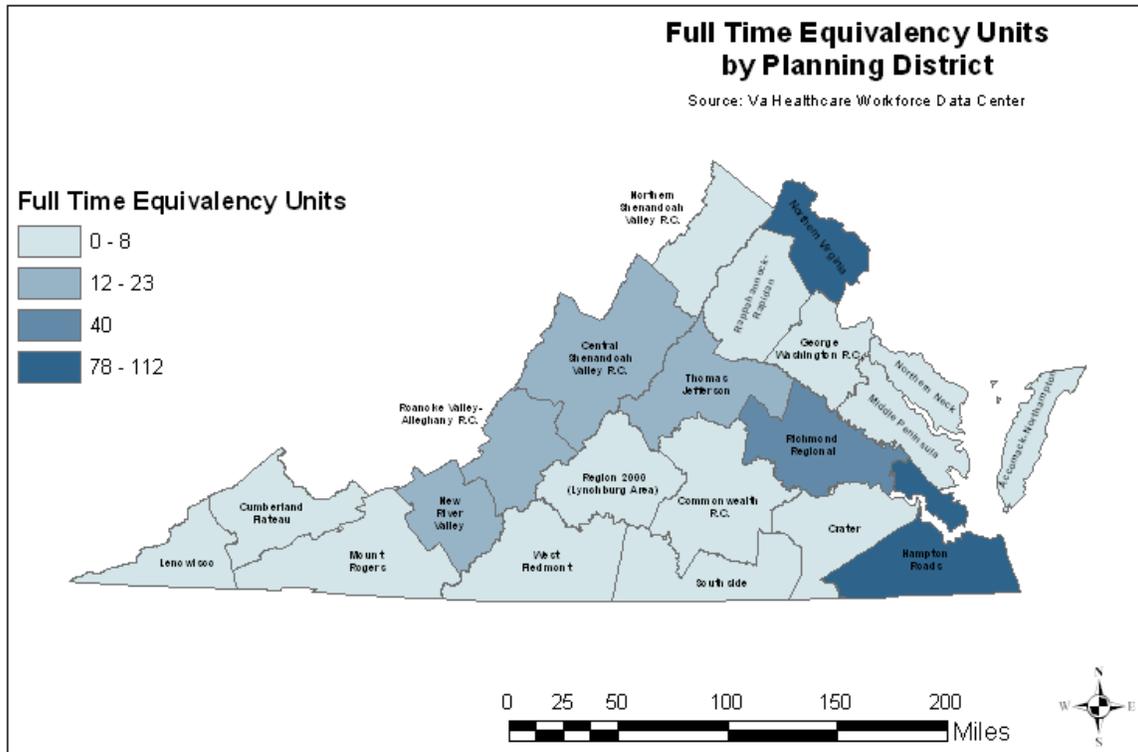
³ Due to assumption violations in Mixed between-within ANOVA (Interaction effect is significant).











Appendix

Weights

Rural Status	Location Weight			Total Weight	
	#	Rate	Weight	Min	Max
Metro, 1 million+	281	79.00%	1.265766	1.11707	2.07383
Metro, 250,000 to 1 million	37	75.68%	1.321429	1.21656	2.16503
Metro, 250,000 or less	56	91.07%	1.098039	0.96905	1.79903
Urban pop 20,000+, Metro adj	7	42.86%	2.333333	2.18957	2.30199
Urban pop 20,000+, nonadj	0	NA	NA	NA	NA
Urban pop, 2,500-19,999, Metro adj	12	91.67%	1.090909	0.96275	1.07551
Urban pop, 2,500-19,999, nonadj	10	70.00%	1.428571	1.34055	1.40938
Rural, Metro adj	1	100.00%	1	0.98589	0.98589
Rural, nonadj	2	100.00%	1	0.92064	0.98589
Virginia border state/DC	86	77.91%	1.283582	1.13279	2.10303
Other US State	34	73.53%	1.36	1.20023	1.58786

Age	Age Weight			Total Weight	
	#	Rate	Weight	Min	Max
Under 30	31	48.39%	2.066667	1.79903	2.16503
30 to 34	81	67.90%	1.472727	1.28201	1.58786
35 to 39	56	80.36%	1.244444	1.08329	2.30199
40 to 44	72	86.11%	1.16129	0.92064	1.25207
45 to 49	59	89.83%	1.113208	0.96275	1.20023
50 to 54	58	84.48%	1.183673	1.0237	2.18957
55 to 59	72	83.33%	1.2	1.03782	1.35904
60 and Over	97	80.41%	1.24359	0.98589	1.40841

See the Methods section on the HWDC website for details on HWDC Methods:

www.dhp.virginia.gov/hwdc/

Final weights are calculated by multiplying the two weights and the overall response rate:

$$\text{Age Weight} \times \text{Rural Weight} \times \text{Response Rate} = \text{Final Weight}$$

Overall Response Rate: 0.792776

